

INFORMATION DISCLOSURE STATEMENT BY APPLICANT (Use as many sheets as necessary)		Complete If Known			
		Application Number	10/729,510		
		Filing Date	December 5, 2003		
		First Named Inventor	William B. Vail, III		
		Art Unit	3672		
Sheet	1	of	2	Examiner Name	Thomas Bomar
				Attorney Docket Number	WEAT/0527.P1

U.S. PATENT DOCUMENTS					
Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number - Kind Code ² (if known)			
[Handwritten marks]		US-6,857,487	02-22-2005	Galloway	
		US- 6,857,486	02-22-2005	Chitwood, et al.	
		US- 6,854,533	02-15-2005	Galloway	
		US- 6,848,517	02-01-2005	Wardley	
		US-6,840,322	01-11-2005	Haynes	
		US-6,752,211	06-22-2004	Dewey, et al.	
		US-6,745,834	06-08-2004	Davis, et al.	
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		US-6,655,460	12-02-2003	Bailey, et al.	
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		US-6,378,633	04-30-2002	Moore	
		US- 6,371,203	04-16-2002	Frank, et al.	

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		Country Code ³ - Number ⁴ - Kind Code ⁵ (if known)				
[Handwritten marks]		EP 0479583	04-08-1992	Gonzalez, et al.		
		EP 1148206	10-24-2001	Scott, et al.		
		GB 2381809	05-14-2003	Ohmer		
		GB 2347445	09-06-2000	Metcalf, et al.		
		WO 99/24689	05-20-1999	Collins		
		WO 99/04135	01-28-1999	Collins		
		WO 97/05360	02-13-1997	Collins		
		WO 03/074836	09-12-2003	Philip		

Examiner Signature	<i>[Handwritten Signature]</i>	Date Considered	11/15/05
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Art Unit	3672
Examiner Name	Thomas Bomar
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		Number - Kind Code ² (if known)			
A		US-6,237,684	05-29-2001	Bouligny, Jr., et al.	
		US- 6,217,258	04-17-2001	Yamamoto, et al.	
		US- 6,012,529	01-11-2000	Mikolajczyk, et al.	
		US- 5,878,815	03-09-1999	Collins	
		US- 5,348,095	09-20-1994	Worrall, et al.	
		US- 5,069,297	12-03-1991	Krueger	
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		US- 2,978,047	04-04-1961	DeVaau	
		US- 2005-000691	01-06-2005	Giroux, et al.	
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		US- 2004-0226751	11-18-2004	McKay, et al.	
		US- 2004-0221997	11-11-2004	Giroux, et al.	
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Examiner
Signature

Frank Long

Date
Considered

11/15/05

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First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0527.P1
Customer No.	36735
Submission Date	January 12, 2005

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		Number-Kind Code ² (if known)			
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	A2	US-2,228,503	01-14-1941	Boyd, et al.	
	A3	US-2,370,832	03-06-1945	Baker	
	A4	US-2,379,800	07-03-1945	Hare	
	A5	US-2,414,719	01-21-1947	Cloud	
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	A7	US-2,741,907	06-06-1997	Genender, et al.	
	A8	US-3,006,415	10-31-1961	Burns, et al.	
	A9	US-3,041,901	07-03-1962	Knights	
	A10	US-3,054,100	09-11-1962	Jones	
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		Number-Kind Code ² (if known)				
7	B1	CA 2 335 192	11-30-2001	Kozak		
	B2	DE 3 523 221	02-01-1987	Svetozar		
	B3	DE 3 918 132	12-14-1989	Eriksson		
	B4	EP 0 474 481	03-11-1992	Moody		
	B5	EP 0 087 373	08-31-1983	Plaquin		

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Application Number	10/729,510
Filing Date	December 5, 2003
First Named Inventor	William Banning Vail, III
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Examiner Name	Unknown
Attorney Docket Number	WEAT/0527.P1
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		Number-Kind Code ² (if known)			
7	A19	US-3,552,507	01-05-1971	Brown	
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		Number-Kind Code ² (if known)				
	B6	EP 0 162 000	11-21-1985	Hamilton		
	B7	EP 0 171 144	02-12-1986	Stringfellow, et al.		
7	B8	EP 0 285 386	10-05-1988	Haney		
	B9	EP 0 426 123	05-08-1991	Reis, et al.		
	B10	EP 0 525 247	02-03-1993	Willis		

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Application Number 10/729,510

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First Named Inventor William Banning Vail, III

Group Art Unit 3672

Examiner Name Unknown

Attorney Docket Number WEAT/0527.P1

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	B11	EP 0 589 823	03-03-1994	Busink, et al.		
	B12	EP 0 659 975	06-28-1995	Nagaoka, et al.		
	B13	EP 0 790 386	08-20-1997	Newton, et al.		
	B14	EP 0 881 354	04-24-1998	Vercaemen, et al.		
	B15	EP 0 962 384	12-08-1999	Poldervaart		

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7	A55	US-4,646,827	03-03-1987	Cobb	
	A56	US-4,649,777	03-17-1987	Buck	
	A57	US-4,667,752	05-26-1987	Berry, et al.	
	A58	US-4,676,312	06-30-1987	Mosing, et al.	
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	A64	US-4,742,876	05-10-1988	Barthelemy, et al.	
	A65	US-4,759,239	07-26-1988	Hamilton, et al.	
	A66	US-4,765,401	08-23-1988	Boyadjieff	
	A67	US-4,773,689	09-27-1988	Wolters	
	A68	US-4,775,009	10-04-1988	Wittrisch, et al.	
	A69	US-4,781,359	11-01-1988	Matus	
	A70	US-4,788,544	11-29-1988	Howard	
	A71	US-4,791,997	12-20-1988	Krasnov	
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	B16	EP 1 256 691	11-13-2002	Hawkins, et al.		
7	B17	FR 2 841 293	12-26-2003	Bouygues Offshore		
	B18	GB 2 115 940	09-14-1983	Plaquin		
	B19	GB 2 224 481	09-05-1990	Voeten		
	B20	GB 2 275 486	04-15-1993	Eiane, et al.		

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Application Number	10/729,510
Filing Date	December 5, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0527.P1
Customer No.	36735
Submission Date	January 12, 2005

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U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
7	A73	US-4,800,968	01-31-1989	Shaw, et al.	
	A74	US-4,806,928	02-21-1989	Veneruso	
	A75	US-4,813,493	03-21-1989	Shaw, et al.	
	A76	US-4,836,064	06-06-1989	Slator	
	A77	US-4,867,236	09-19-1989	Haney, et al.	
	A78	US-4,878,546	11-07-1989	Shaw, et al.	
	A79	US-4,901,069	02-13-1990	Veneruso	
	A80	US-4,936,382	06-26-1990	Thomas	
	A81	US-4,962,579	10-16-1990	Moyer, et al.	
	A82	US-5,009,265	04-23-1991	Bailey, et al.	
	A83	US-5,036,927	08-06-1991	Willis	
	A84	US-5,141,063	08-25-1992	Quesenbury	
	A85	US-5,176,518	01-05-1993	Hordijk, et al.	
	A86	US-5,191,932	03-09-1993	Seefried, et al.	
	A87	US-5,224,540	07-06-1993	Streich, et al.	
	A88	US-5,233,742	08-10-1993	Gray, et al.	
	A89	US-5,245,265	09-14-1993	Clay	
	A90	US-5,251,709	10-12-1993	Richardson	

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Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Number-Kind Code ² (if known)				
7	B21	GB 2 294 715	08-05-1996	Tibblitts		
	B22	GB 2 349 401	11-01-2000	Roberts, et al.		
	B23	GB 2 352 747	07-02-2001	Davis, et al.		
	B24	GB 2 357 530	06-27-2001	Schulze-Beckinghausen		
	B25	GB 2 372 765	09-04-2002	Head		

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Substitute for form 1449A/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	10/729,510
Filing Date	December 5, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0527.P1
Customer No.	36735
Submission Date	January 12, 2005

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U.S. PATENT DOCUMENTS

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		Number-Kind Code ² (if known)			
7	A91	US-5,271,468	12-21-1993	Streich, et al.	
	A92	US-5,305,839	04-26-1994	Kalsi, et al.	
	A93	US-5,332,043	07-26-1994	Ferguson	
	A94	US-5,351,767	10-04-1994	Stogner, et al.	
	A95	US-5,388,651	02-14-1995	Berry	
	A96	US-5,394,823	03-07-1995	Lenze	
	A97	US-5,433,279	07-18-1995	Tassarl, et al.	
	A98	US-5,494,122	02-27-1996	Larsen, et al.	
	A99	US-5,501,286	03-26-1996	Berry	
	A100	US-5,503,234	04-02-1996	Clanton	
	A111	US-5,540,279	07-30-1996	Branch, et al.	
	A112	US-5,542,472	08-06-1996	Pringle, et al.	
	A113	US-5,542,473	08-06-1996	Pringle, et al.	
	A114	US-5,553,672	09-10-1996	Smith, Jr., et al.	
	A115	US-5,577,566	11-26-1996	Albright, et al.	
	A116	US-5,645,131	07-08-1997	Trevisani	
	A117	US-5,706,894	01-13-1998	Hawkins, III	
	A118	US-5,791,410	08-11-1998	Castille, et al.	

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Examiner Initials [*]	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Number-Kind Code ² (if known)				
7	B26	GB 709 365	05-19-1954	Standard Oil Development		
	B27	GB 716 761	10-13-1954	Standard Oil Development		
	B28	GB 881 358	11-01-1961	Kammerer, et al.		
	B29	GB 2 350 137	11-22-2000	Baugh, et al.		
	B30	RU 2 079 633	05-20-1997	Abdrakhmanov		

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

(Use as many sheets as necessary)

Application Number	10/729,510
Filing Date	December 5, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0527.P1
Customer No.	36735
Submission Date	January 12, 2005

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U.S. PATENT DOCUMENTS

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		Number-Kind Code ² (if known)			
7	A119	US-5,803,191	09-08-1998	Mackintosh	
	A120	US-5,813,456	09-29-1998	Milner, et al.	
	A121	US-5,836,395	11-17-1998	Budde	
	A122	US-5,839,515	11-24-1998	Yuan, et al.	
	A123	US-5,850,877	12-22-1998	Albright, et al.	
	A124	US-5,907,664	05-25-1999	Wang, et al.	
	A125	US-5,909,768	06-08-1999	Castille, et al.	
	A126	US-5,971,086	10-26-1999	Bee, et al.	
	A127	US-5,984,007	11-16-1999	Yuan, et al.	
	A128	US-5,988,273	11-23-1999	Monjure, et al.	
	A129	US-6,056,060	05-02-2000	Abrahamsen, et al.	
	A130	US-6,070,500	06-06-2000	Diask, et al.	
	A131	US-6,079,498	06-27-2000	Lima, et al.	
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	A133	US-6,142,545	11-07-2000	Penman, et al.	
	A134	US-6,161,617	12-19-2000	Gjedebo	
	A135	US-6,173,777	01-16-2001	Mullins	
	A136	US-6,199,641	03-13-2001	Downie, et al.	

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		Number-Kind Code ² (if known)				
	B31	WO 00/39429	07-06-2000	Pietras		
	B32	WO 00/39430	07-06-2000	Pietras		
	B33	WO 00/46484	08-10-2000	Van Buren, et al.		
7	B34	WO 00/66879	11-09-2000	Hawkins, et al.		
	B35	WO 02/081863	10-17-2002	Simpson, et al.		

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Frank T. [Signature]

Date Considered

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**INFORMATION DISCLOSURE
STATEMENT BY APPLICANT**

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Application Number	10/729,510
Filing Date	December 5, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0527.P1
Customer No.	36735
Submission Date	January 12, 2005

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U.S. PATENT DOCUMENTS

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		Number-Kind Code ² (if known)			
7	A137	US-6,223,823	05-01-2001	Head	
	A138	US-6,227,587	05-08-2001	Terral	
	A139	US-6,275,938	08-14-2001	Bond, et al.	
	A140	US-6,290,432	09-18-2001	Exley, et al.	
	A141	US-6,305,469	10-23-2001	Coenen, et al.	
	A142	US-6,309,002	10-30-2001	Bouligny	
	A143	US-6,349,764	02-26-2002	Adams, et al.	
	A144	US-6,360,633	03-26-2002	Pietras	
	A145	US-6,367,566	04-09-2002	Hill	
	A146	US-6,374,506	04-23-1993	Clay	
	A147	US-6,392,317	05-21-2002	Hall, et al.	
	A148	US-6,429,784	08-06-2002	Belque, et al.	
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	A150	US-6,446,723	09-10-2002	Ramons, et al.	
	A151	US-6,622,796	09-23-2003	Pietras	
	A152	US-6,648,075	11-18-2003	Badrak, et al.	
	A153	US-6,688,394	02-10-2004	Ayling	
	A154	US-6,691,801	02-17-2004	Juhasz, et al.	

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Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Number-Kind Code ² (if known)				
	B36	WO 02/44601	06-06-2002	Appleford, et al.		
	B37	WO 03/087525	10-23-2003	Vincent, et al.		
	B38	WO 93/07358	04-15-1993	Elane, et al.		
7	B39	WO 96/18799	06-20-1996	Stokka		
	B40	WO 98/05844	02-12-1998	Stokka		

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Application Number	10/729,510
Filing Date	December 5, 2003
First Named Inventor	William Banning Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0527.P1
Customer No.	36735
Submission Date	January 12, 2005

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U.S. PATENT DOCUMENTS

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		Number-Kind Code ² (if known)			
7	A155	US-6,698,595	03-02-2004	Norell, et al.	
	A156	US-6,725,938	04-27-2004	Pietras	
	A157	US-6,742,596	06-01-2004	Haugen	
	A158	US-6,742,606	06-01-2004	Metcalfe, et al.	
	A159	US-2002/0070842	04-17-2003	Bailey, et al.	
	A160	US-2002/0108748	08-15-2002	Keyes	
	A161	US-2003/0029641	02-13-2003	Meehan	
	A162	US-2003/0056947	03-27-2003	Cameron	
	A163	US-2003/0164250	09-04-2003	Wardley	
	A164	US-2003/0164251	09-04-2003	Tulloch	
	A165	US-2003/0173090	09-18-2003	Cook, et al.	
	A166	US-2003/0213598	11-20-2003	Hughes	
	A167	US-2004/0003944	01-08-2004	Vincent, et al.	
	A168	US-2004/000405	01-01-2004	Fournier, Jr., et al.	
	A169	US-2004/0011534	01-22-2004	Simonds, et al.	
	A170	US-2004/0060697	04-01-2004	Tilton, et al.	
	A171	US-2004/0069500	04-15-2004	Haugen	
	A172	US-2004/0079533	04-29-2004	Buytaert, et al.	

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		Number-Kind Code ² (if known)				
7	B41	WO 98/11322	03-19-1998	Gjedabo		
	B42	WO 98/32948	07-30-1998	Pietras		
	B43	WO 99/35368	07-15-1999	Lohbeck, et al.		
	B44	WO 99/41485	08-19-1999	Pietras		
	B45	WO 99/58810	11-18-1999	Abrahamsen, et al.		

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Date Considered

11/15/05

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INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number

10/729,510

Filing Date

December 5, 2003

First Named Inventor

William Banning Vail, III

Group Art Unit

3672

Examiner Name

Unknown

Attorney Docket Number

WEAT/0527.P1

Customer No.

36735

Sheet 10

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Submission Date

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7	A173	US-2004/0108142	06-10-2004	Vail, III	
	A174	US-2004/0112646	06-17-2004	Vail	
	A175	US-2004/0118613	06-24-2004	Vail	
	A176	US-2004/0123984	07-01-2004	Vail	
	A177	US-2004/0124015	07-01-2004	Vaile, et al.	
	A178	US-2004/0129456	07-08-2004	Vail	
	A179	US-2004/0140128	07-22-2004	Vail	
	A180	US-2004/0173358	09-09-2004	Haugen	
	A181	US-2004/0216925	11-04-2004	Metcalfe, et al.	
	A182	US-2004/0112646	06-17-2004	Vail	
7	A183	US-Re 34,063	09-15-1992	Vincent, et al.	
	A184	US-			
	A185	US-			
	A186	US-			
	A187	US-			
	A188	US-			
	A189	US-			
	A190	US-			

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		Number-Kind Code ² (if known)				
7	B46	FR 2 741907	06-06-1997	Leighton		
	B47					
	B48					
	B49					
	B50					

Examiner

Date Considered

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Substitute for form 1449B/PTO

INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Application Number

10/729,510

Filing Date

December 5, 2003

First Named Inventor

William Banning Vail, III

Group Art Unit

3672

Examiner Name

Unknown

Attorney Docket Number

WEAT/0527.P1

Customer No.

36735

Sheet 11

of 12

Submission Date

January 12, 2005

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
<i>FF</i>		DETLEF HAHN, FRIEDHELM MAKOH, and LARRY WATKINS, Casing-While Drilling System Reduces Hole Collapse Risks, Offshore, Pages 54, 56, and 59, February 1998	
<i> </i>		YAKOV A. GELFGAT, MIKHAIL Y. GELFGAT and YURI S. LOPATIN, Retractable Drill Bit Technology – Drilling Without Pulling Out Drillpipe, Advanced Drilling Solutions Lessons From the FSU; June 2003; Vol. 2, pps. 351-464	
<i> </i>		TOMMY WARREN, SPE, BRUCE HOUTCHENS, SPE, GARRET MADELL, SPE, Directional Drilling With Casing, SPE/IADC 79914, Tesco Corporation, SPE/IADC Drilling Conference 2003	
<i> </i>		LaFleur Petroleum Services, Inc., "Autoseal Circulating Head," Engineering Manufacturing, 1992, 11 Pages	
<i> </i>		Valves Wellhead Equipment Safety Systems, W-K-M Division, ACF Industries, Catalog 80, 1980, 5 Pages	
<i> </i>		Canrig Top Drive Drilling Systems, Harts Petroleum Engineer International, February 1997, 2 Pages	
<i> </i>		The Original Portable Top Drive Drilling System, TESCO Drilling Technology, 1997	
<i> </i>		MIKE KILLALEA, Portable Top Drives: What's Driving The Market?, IADC, Drilling Contractor, September 1994, 4 Pages	
<i>FF</i>		500 or 650 ECIS Top Drive, Advanced Permanent Magnet Motor Technology, TESCO Drilling Technology, April 1998, 2 Pages	

Examiner

Date Considered

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 τ^2

500 or 650 HCIS Top Drive, Powerful Hydraulic Compact Top Drive Drilling System, TESCO Drilling Technology, April 1998, 2 Pages

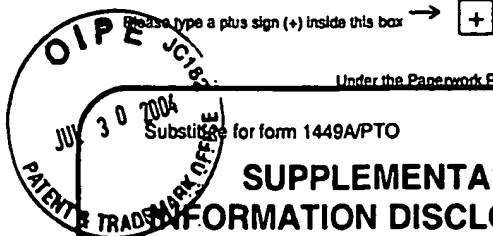
Product Information (Sections 1-10) CANRIG Drilling Technology, Ltd., September 18, 1996

Examiner

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Substitute for form 1449A/PTO

SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet 1

of 1

Application Number	10/729,510
Filing Date	December 5, 2003
First Named Inventor	Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0527.P1
Submission Date	July 27, 2004

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
	A1				
	A2				
	A3				
	A4				
	A5				
	A6				
	A7				
	A8				
	A9				
	A10				
	A11				
	A12				
	A13				
	A14				
	A15				
	A16				
	A17				
	A18				

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T ²
FB	C1	Rotary Drilling, The Drill Stem, Unit I, Lesson 3, Second Edition, The University of Texas at Austin, Austin, Texas	
FB	C2	Rotary Drilling Series, The Rotary Rig and Its Components, Unit I, Lesson 1, Third Edition, The University of Texas at Austin, Austin, Texas	

Examiner

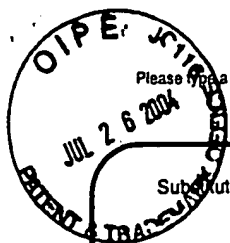
Frank Bo

Date Considered

11/15/05

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet 1 of 11

Application Number	10/729,510
Filing Date	December 5, 2003
First Named Inventor	Vail, III
Group Art Unit	3672
Examiner Name	Unknown
Attorney Docket Number	WEAT/0527.P1
Submission Date	July 22, 2004

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
7	A1	US-6742606 B2	06/01/2004	Melcalfe, et al.	
	A2	US-6702040 B1	03/09/2004	Sensenig	
	A3	US-6668937	12/30/2003	Murray	
	A4	US6634430	10/21/2003	Dawson et al.	
	A5	US-6547017 B1	04/15/2003	Vail, III	
	A6	US-6543552 B1	04/08/2003	Melcalfe, et al.	
	A7	US-6536993 B2	03/25/2003	Strong, et al.	
	A8	US-6457532 B1	10/01/2002	Simpson	
	A9	US-6263987 B1	07/24/2001	Vail, III	
	A10	US-6216533 B1	04/17/2001	Woloson, et al.	
	A11	US-6189616 B1	02/20/2001	Gano, et al.	
	A12	US-6186233 B1	02/13/2001	Brunet	
	A13	US-6155360	12/05/2000	McLeod	
	A14	US-6135208	10/24/2000	Gano, et al.	
	A15	US-6098717	08/08/2000	Bailey et al.	
	A16	US-6070671	06/06/2000	Cumming et al.	
	A17	US-6035953	03/14/2000	Rear	
	A18	US-6024169	02/15/2000	Haugen	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
7	B1	DE 3 213 464	10/13/1983	Reimer		
	B2	DE 4 133 802	10/22/1992	Andrejewski		
	B3	EP 0 235 105	09/02/1987	Kjell-Oue		
	B4	EP 0 265 344	04/27/1988	Legendre		
	B5	EP 0 462 618	12/27/1991	Karlsson		

Examiner

Date Considered

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Substitute for form 1449A/PTO SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT <i>(Use as many sheets as necessary)</i>				Application Number	10/729,510
				Filing Date	December 5, 2003
				First Named Inventor	Vail, III
				Group Art Unit	3672
				Examiner Name	Unknown
				Attorney Docket Number	WEAT/0527.P1
Sheet	2	of	11	Submission Date	July 22, 2004

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
7	A19	US-5887668	03/30/1999	Haugen et al.	
	A20	US-5887655	03/30/1999	Haugen, et al.	
1	A21	US-5836409	11/17/1998	Vail, III	
	A22	US-5826651	10/27/1998	Lee, et al.	
	A23	US-5803666	09/08/1998	Keller	
	A24	US-5787978	08/04/1998	Carter, et al.	
	A25	US-5785132	07/28/1998	Richardson, et al.	
	A26	US-5717334	02/10/1998	Vail, III, et al.	
	A27	US-5706905	01/13/1998	Barr	
	A28	US-5615747	04/01/1997	Vail, III	
	A29	US-5575344	11/19/1996	Wireman	
	A30	US-5560440	10/01/1996	Tibbitts	
	A31	US-5553679	09/10/1996	Thorp	
	A32	US-5546317	10/10/1995	Hood, III, et al.	
	A33	US-5526880	06/18/1996	Jordan, Jr., et al.	
	A34	US-5520255	05/28/1996	Barr et al.	
	A35	US-5477925	12/26/1995	Trahan, et al.	
	A36	US-5458209	10/17/1995	Hayes, et al.	
	A37	US-5435400	07/25/1995	Smith	
	A38	US-5402856	04/04/1995	Warren, et al.	

FOREIGN PATENT DOCUMENTS

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		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
7	B6	EP 0 554 568	08/11/1993	Tibbitts, et al.		
	B7	EP 0 961 007	12/06/1999	Gano, et al.		
7	B8	EP 1 006 260	06/07/2000	Fincher, et al.		
	B9	GB 2 335 217	09/15/1999	Desai		

Examiner *Francis [Signature]*

Date Considered *11/15/05*

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

3

of

11

Application Number

10/729,510

Filing Date

December 5, 2003

First Named Inventor

Vail, III

Group Art Unit

3672

Examiner Name

Unknown

Attorney Docket Number

WEAT/0527.P1

Submission Date

July 22, 2004

U.S. PATENT DOCUMENTS

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		Number-Kind Code ² (if known)			
7	A39	US-5361859	11/08/1994	Tibbitts	
	A40	US-5322127	06/21/1991	McNair et al.	
1	A41	US-5318122	06/07/1994	Murray, et al.	
	A42	US5181571	01/27/1993	Mueller	
	A43	US-5109924	05/05/1992	Jurgens, et al.	
	A44	US-5052483	10/01/1991	Hudson	
	A45	US-4904119	02/27/1990	Legendre, et al.	
	A46	US-4848469	07/18/1989	Baugh et al.	
	A47	US-4836299	06/06/1989	Bodine	
	A48	US-4825947	05/02/1989	Mikolajczyk	
	A49	US-4699224	10/13/1987	Burton	
	A50	US-4681158	07/21/1987	Pennison	
	A51	US-4620600	11/04/1986	Persson	
	A52	US-4604818	08/12/1996	Inoue	
	A53	US4595058	06/17/1986	Nations	
	A54	US-4515045	05/07/1985	Gnatchenko, et al.	
	A55	US-4489793	12/25/1984	Boren	
	A56	US-4483399	11/20/1984	Colgate	
	A57	US-4466498	08/21/1984	Bardwell	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ³
		Country Code ² -Number ⁴ -Kind Code ⁵ (if known)				
7	B10	GB 1 469 661	04/06/1977	Swobda, et al.		
	B11	GB 1 277 461	06/03/1972			
7	B12	GB 1 448 304	09/02/1976			
	B13	GB 1 582 392	01/07/1981			

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Date Considered

11/15/05

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

4

of

11

Application Number

10/729,510

Filing Date

December 5, 2003

First Named Inventor

Vail, III

Group Art Unit

3672

Examiner Name

Unknown

Attorney Docket Number

WEAT/0527.P1

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July 22, 2004

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
7	A58	US-4446745	05/08/1994	Stone, et al.	
	A59	US-4396076	08/02/1983	Inoue	
	A60	US-4396077	09/12/1981	Radtke	
	A61	US-4274778	06/23/1981	Putnam, et al.	
	A62	US-4221269	09/09/1980	Hudson	
	A63	US-4189185	02/19/1980	Kammerer, Jr., et al.	
	A64	US-4186628	02/05/1990	Bonnice	
	A65	US-4100981	07/18/1978	Chaffin	
	A66	US-4083405	04/11/1978	Shirley	
	A67	US-3934660	01/27/1976	Nelson	
	A68	US-3901331	08/26/1975	Djurovic	
	A69	US-3785193	01/15/1974	Kinley et al.	
	A70	US-3700048	10/24/1972	Desmoulins	
	A71	US-3691624	09/19/1972	Kinley	
	A72	US-3669190	06/13/1972	Sizer et al.	
	A73	US-3624760	11/30/1971	Bodine	
	A74	US-3575245	04/20/1971	Cordary, et al.	
	A75	US-3489220	01/13/1970	Kinley	
	A76	US3387893	06/11/1968	Hoever	

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
	B14	GB 2 053 088	02/04/1981	Gebhart		
	B15	GB 2 201 912	09/14/1988	Dinsdale		
	B16	GB 2 313 860	02/10/1997	Lee		
	B17	GB 2 320 270	06/17/1998	Armell, et al.		
	B18	GB 2 333 542	07/28/1999	Kirk		

Examiner

Date Considered

11/15/05

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SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Sheet

5

of

11

Application Number

10/729,510

Filing Date

December 5, 2003

First Named Inventor

Vail, III

Group Art Unit

3672

Examiner Name

Unknown

Attorney Docket Number

WEAT/0527.P1

Submission Date

July 22, 2004

U.S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code ² (if known)			
7	A77	US-3353599	11/21/1967	Swift	
	A78	US-3191680	06/29/1965	Vincent	
	A79	US-3191677	06/29/1965	Kinley	
	A80	US-3169592	02/26/1965	Kammerer	
	A81	US-3102599	09/03/1963	Hillburn	
	A82	US-3087546	04/30/1963	Wooley	
	A83	US-2805043	09/03/1957	Williams	
	A84	US-2765146	10/02/1956	Williams	
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	A86	US-2743087	04/24/1956	Layne, et al.	
	A87	US-2663073	12/22/1953	Bieber et al.	
	A88	US-2641444	06/09/1953	Moon	
	A89	US-2627891	02/10/1953	Clark	
	A90	US-2499630	03/07/1950	Clark	
	A91	US-2324679	07/20/1943	Cox	
	A92	US2295803	09/15/1940	O'Leary	
	A93	US-2216895	10/08/1940	Stokes	
	A94	US-2060352	11/11/1936	Stokes	

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Examiner Initials*	Cite No. ¹	Foreign Patent Document	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T ⁶
		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
7	B19	GB 2 365 463	02/20/2002	Giancarlo		
	B20	GB 2 382 361	05/28/2003	Hewson, et al.		
	B21	GB 2 216 926	10/18/1989	Haloid		
	B22	GB 2 348 223	09/27/2000	Cook, et al.		

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				Filing Date	December 5, 2003
				First Named Inventor	Vail, III
				Group Art Unit	3672
				Examiner Name	Unknown
				Attorney Docket Number	WEAT/0527.P1
Sheet	6	of	11	Submission Date	July 22, 2004

U.S. PATENT DOCUMENTS					
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		Number-Kind Code ² (if known)			
7	A95	US-2049450	08/04/1936	Johnson	
	A96	US-2017451	10/15/1935	Wickersham	
	A97	US-1981525	11/20/1934	Price	
	A98	US-1880218	10/04/1932	Simmons	
	A99	US-1342424	06/08/1920	Cotten	
	A100	US-1301285	04/22/1919	Leonard	
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	A102	US-2004/0069501	04/15/2004	Haugen et al.	
	A103	US-2003/0217865	11/27/2003	Simpson, et al.	
	A104	US-2003/0146023	08/07/2003	Pia	
	A105	US-2003/0141111	07/31/2004	Pia	
	A106	US-2003/0111267	06/19/2003	Pia	
	A107	US-2003/0056991	03/27/2003	Hahn, et al.	
	A108	US-2002/0079102	06/27/2002	Dewey, et al.	
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	A110	US-2001/0002626	6/7/2001	Frank, et al.	
	A111	US-5833002	11/10/1998	Holcombe	
	A112	US-5615747	04/01/1997	Vail, III	
	A113	US-5375668	12/27/1994	Hallundbaek	
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	A116	US-4960173	10/02/1990	Cognevich, et al.	
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		Country Code ³ -Number ⁴ -Kind Code ⁵ (if known)				
7	B23	GB 540 027	10/02/1941			
	B24	GB 7 928 86	04/12/1958			
	B25	GB 8 388 33	06/22/1960			
	B26	GB 9 877 21	07/07/1965	Garnier, et al.		

Examiner

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		First Named Inventor	Vail, III
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		Examiner Name	Unknown
		Attorney Docket Number	WEAT/0527.P1
Sheet 7	of 11	Submission Date	July 22, 2004

FOREIGN PATENT DOCUMENTS

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		Country Code ² -Number ³ -Kind Code ⁴ (if known)				
F	B27	USSR 112631	01/10/1956	Barshai, et al.		
	B28	USSR 1304470	08/31/1984	Gelfat, et al.		
I	B29	USSR 1808972	05/22/1991	Voroshbitov, et al.		
	B30	USSR 247162	05/10/1967	Barshai, et al.		
	B31	USSR 395557	12/30/1971	Barshai, et al.		
	B32	USSR 415346	03/03/1972	Barshai, et al.		
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	B36	USSR 581238	02/23/1976	Barshai, et al.		
	B37	USSR 583278	08/30/1974	Barshai, et al.		
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	B46	WO 01/83932	11/08/2001	Tulloch		
V	B47	WO 90/06418	06/14/1990	Schulze-Bechinghausen		
	B48	WO 92/01139	01/23/1992	Nobilequ		
F	B49	WO 92/18743	10/29/1992	Pietras		
	B50	WO 92/20899	11/26/1992	Ellis		
	B51	WO 93/24728	12/09/1993	Simpson		

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				Filing Date	December 5, 2003
				First Named Inventor	Vail, III
				Group Art Unit	3672
				Examiner Name	Unknown
				Attorney Docket Number	WEAT/0527.P1
Sheet	8	of	11	Submission Date	July 22, 2004

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		Country Code ¹ -Number ¹ -Kind Code ¹ (if known)				
7	B52	WO 95/10686	04/20/1995	Lorenz, et al.		
	B53	WO 98/28635	09/19/1996	Strong, et al.		
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	B55	WO 99/23354	05/14/1999	Metcalfe		
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	B57	WO 99/50528	10/07/1999	Kuck, et al.		
	B58	WO 99/64713	12/16/1999	Wardley		
	B59	WO 99/11902	03/11/1999	Hollingsworth		
7	B50	FR 2053088	07/20/1970	Gottwald		
	B72	WO 00/08293	02/17/2000	Van Drentham-Susman		
7	B73	WO 91/16520	10/31/1991	Hallundbaek		
	B74					
	B75					
	B76					
	B77					
	B78					

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		First Named Inventor	Vail, III
		Group Art Unit	3672
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		Attorney Docket Number	WEAT/0527.P1
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7	C1	HAHN, ET AL., "Simultaneous Drill and Case Technology - Case Histories, Status and Options for Further Development," Society of Petroleum Engineers, IADC/SPE Drilling Conference, New Orleans, LA Feb. 23-25, 2000 pp. 1-9.	
	C2	M.B. STONE and J. SMITH, "Expandable Tubulars and Casing Drilling are Options" Drilling Contractor, January/February 2002, pp. 52.	
	C3	M. GELFGAT, "Retractable Bits Development and Application" Transactions of the ASME, Vol. 120, June (1998), pp. 124-130.	
	C4	"First Success with Casing-Drilling" Word Oil, February (1999), pp. 25.	
	C5	DEAN E. GADDY, Editor, "Russia Shares Technical Know-How with U.S." Oil & Gas Journal, March (1999), pp. 51-52 and 54-56.	
	C6	United States Patent Application 10/794,800, filed March 5, 2004 (WEAT/0360)	
	C7	United States Patent Application 10/832,804, filed April 27, 2004 (WEAT/0383.P1)	
	C8	United States Patent Application 10/795,214, filed March 5, 2004 (WEAT/0373)	
	C9	United States Patent Application 10/794,795, filed March 5, 2004 (WEAT/0357)	
	C10	United States Patent Application 10/775,048, filed February 9, 2004 (WEAT/0359)	
	C11	United States Patent Application 10/772,217, filed February 2, 2004 (WEAT/0344)	
7	C12	United States Patent Application 10/788,976, filed February 27, 2004 (WEAT/0372)	

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		First Named Inventor	Vail, III
		Group Art Unit	3672
		Examiner Name	Unknown
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Sheet 10	of 11	Submission Date	July 22, 2004

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F	C13	United States Patent Application 10/794,797, filed March 5, 2004 (WEAT/0371)	
	C14	United States Patent Application 10/767,322, filed January 29, 2004 (WEAT/0343)	
	C15	United States Patent Application 10/795,129, filed March 5, 2004 (WEAT/0366)	
	C16	United States Patent Application 10/794,790, filed March 5, 2004 (WEAT/0329)	
	C17	United States Patent Application 10/162,302, filed June 4, 2004 (WEAT/0410)	
	C18	Rotary Steerable Technology – Technology Gains Momentum, Oil & Gas Journal, 12/28/1998	
	C19	Directional Drilling, M. Mims, World Oil, May 1999, pp. 40-4	
	C20	Multilateral Classification System w/Example Applications, Alan MacKenzie & Cliff Hogg, World Oil, Jan. 1999, pp. 55-61	
	C21	Rotary Drilling, Open-Hole Fishing, Unit III, Lesson 2, Third Edition, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C22	Rotary Drilling, Casing and Cementing, Unit II, Lesson 4, Second Edition, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
F	C23	Rotary Drilling, Drilling a Straight Hole, Unit II, Lesson 3, Second Edition, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C24	Rotary Drilling, The Bit, Unit I, Lesson 2, Third Edition, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	

Examiner	<i>Frank Ray</i>	Date Considered	11/15/05
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F	C25	Rotary Drilling, Blowout Prevention, Unit III, Lesson 3, Third Edition, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C26	Well Servicing and Workover, Artificial Lift Methods, Lesson 5, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C27	Rotary Drilling, Drilling Mud, Unit II, Lesson 2, Third Edition, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C28	Rotary Drilling, Subsea Blowout Preventers and Marine Riser Systems, Unit III, Lesson 4, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C29	Well Servicing and Workover, Control of Formation Pressure, Lesson 9, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C30	Well Servicing and Workover, Production Rig Equipment, Lesson 6, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C31	Well Servicing and Workover, Petroleum Geology and Reservoirs, Lesson 2, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C32	Well Servicing and Workover, Well Logging Methods, Lesson 3, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C33	Well Servicing and Workover, Introduction to Oil Well Service and Workover, Lesson 1, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C34	Well Servicing and Workover, Well Completion Methods, Lesson 4, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C35	Rotary Drilling, Controlled Directional Drilling, Unit III, Lesson 1, Third Edition, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C36	Well Servicing and Workover, Well Stimulation Treatments, Lesson 11, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C37	Rotary Drilling, Making Hole, Unit II, Lesson 1, Second Edition, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C38	Well Servicing and Workover, Well Cleanout and Repair Methods, Lesson 8, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C39	Well Servicing and Workover, Well Servicing and Repair, Lesson 7, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
F	C40	Rotary Drilling, Circulating Systems, Unit I, Lesson 8, Third Edition, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C41	Well Servicing and Workover, Well Service and Workover Profitability, Lesson 12, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
	C42	Rotary Drilling, Testing and Completing, Unit II, Lesson 5, Second Edition, Petroleum Extension Service, The University of Texas at Austin, Austin, Texas	
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Examiner

Frank [Signature]

Date Considered

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Examiner Unknown		Group 3672	

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	A2	6,554,064	04-29-2003	Restarick et al.	166	250.01	
	A3	6,543,538	04-08-2003	Tolman et al.	166	284	
	A4	6,538,576	03-25-2003	Schultz et al.	340	859.6	
	A5	6,536,522	03-25-2003	Birckhead et al.	166	250.15	
	A6	6,536,520	03-25-2003	Snider et al.	166	78.1	
	A7	6,527,064	03-04-2003	Hallundbaek	175	320	
	A8	6,527,047	03-04-2003	Pietras	166	77.51	
	A9	6,509,301	01-21-2003	Vollmer	507	236	
	A10	6,497,280	12-24-2002	Beck et al.	166	250.07	
	A11	6,484,818	11-26-2002	Alft et al.	175	45	
	A12	6,464,004	10-15-2002	Crawford et al.	166	250.01	
	A13	6,443,247	09-03-2002	Wardley	175	402	
	A14	6,443,241	09-03-2002	Juhasz et al.	175	52	
	A15	6,427,776	08-06-2002	Hoffman et al.	166	311	
	A16	6,419,033	07-16-2002	Hahn et al.	176	61	
	A17	6,419,014	07-16-2002	Meek et al.	166	255.2	
	A18	6,412,574	07-02-2002	Wardley et al.	175	7	
	A19	6,412,554	07-02-2002	Allen et al.	166	80.1	
	A20	6,408,943	06-25-2002	Schultz et al.	166	285	
	A21	6,405,798	06-18-2002	Barrett et al.	166	250.01	
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	A23	6,378,633	04-30-2002	Moore et al.	175	325.5	
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	A25	6,378,627	04-30-2002	Tubel et al.	175	24	
<i>F</i>	A26	6,374,924	04-23-2002	Hanton et al.	176	6	
<i>F</i>	A27	6,371,203	04-16-2002	Frank et al.	166	207	

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7	A29	6,357,485	03-19-2002	Quigley et al.	138	125		
	A30	6,354,373	03-12-2002	Vercaemer et al.	166	277		
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	A33	6,325,148	12-04-2001	Trahan et al.	166	297		
	A34	6,315,051	11-13-2001	Ayling	166	380		
	A35	6,311,792	11-06-2001	Scott et al.	175	162		
	A36	6,296,066	10-02-2001	Terry et al.	175	92		
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	A38	6,263,987	07-24-2001	Vail, III	175	318		
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	A40	6,234,257	05-22-2001	Ciglenec et al.	175	50		
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	A42	6,220,117	04-24-2001	Butcher	76	108.2		
	A43	6,206,112	03-27-2001	Dickinson, III et al.	175	67		
	A44	6,196,336	03-06-2001	Fincher et al.	175	101		
	A45	6,192,980	02-27-2001	Tubel et al.	166	65.1		
	A46	6,189,621	02-20-2001	Vail, III	166	385		
	A47	6,182,776	02-06-2001	Asberg	175	300		
	A48	6,179,055	01-30-2001	Sallwasser et al.	166	254.2		
	A49	6,172,010	01-09-2001	Argillier et al.	507	102		
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7	A51	6,158,531	12-12-2000	Vail, III	175	318		
7	A52	6,148,664	11-21-2000	Baird	73	152.38		
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	A58	6,061,000	05-09-2000	Edwards	340	854.6		
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	A65	5,954,131	09-21-1999	Sallwasser	166	254.2		
	A66	5,950,742	09-14-1999	Caraway	175	57		
	A67	5,947,213	09-07-1999	Angle et al.	175	24		
	A68	5,931,231	08-03-1999	Mock	166	377		
	A69	5,921,332	07-13-1999	Spedale, Jr.	175	415		
	A70	5,921,285	07-13-1999	Quigley et al.	138	125		
	A71	5,913,337	06-22-1999	Williams et al.	138	125		
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	A75	5,809,549	04-06-1999	Sprehe	175	71		
	A76	5,890,537	04-06-1999	Lavaure et al.	166	285		
<i>7</i>	A77	5,860,474	01-19-1999	Stoltz et al.	166	50		
<i>7</i>	A78	5,845,722	12-08-1998	Makohl et al.	175	101		
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	A80	5,842,149	11-24-1998	Harrell et al.	702	9		
	A81	5,839,519	11-24-1998	Spedale, Jr.	175	57		
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	A83	5,829,520	11-03-1998	Johnson	166	250.1		
	A84	5,828,003	10-27-1998	Thomeer et al.	174	69		
	A85	5,804,713	09-08-1998	Kluth	73	152.01		
	A86	5,794,703	08-18-1998	Newman et al.	166	381		
	A87	5,785,134	07-28-1998	McLeod et al.	175	258		
	A88	5,769,160	06-23-1998	Owens	166	65.1		
	A89	5,746,276	05-05-1998	Stuart	173	1		
	A90	5,743,344	04-28-1998	McLeod et al.	175	259		
	A91	5,735,348	04-07-1998	Hawkins, III	166	285		
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	A93	5,720,356	02-24-1998	Gardes	175	62		
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	A95	5,667,026	09-16-1997	Lorenz et al.	175	162		
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	A101	5,651,420	07-29-1997	Tibbitts et al.	175	102		
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	A103	5,582,259	12-10-1996	Barr	175	73		
	A104	5,560,437	10-01-1996	Dickel et al.	175	40		
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	A110	5,535,824	07-16-1996	Hudson	166	207		
	A111	5,497,840	03-12-1996	Hudson	175	72		
	A112	5,472,057	12-05-1995	Winfree	175	57		
	A113	5,452,923	09-26-1995	Smith	285	145		
	A114	5,412,568	05-02-1995	Schultz	364	422		
	A115	5,398,760	03-21-1995	George et al.	166	297		
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	A117	5,386,746	02-07-1995	Hauk	81	57.34		
	A118	5,379,835	01-10-1995	Streich	166	181		
	A119	5,368,113	11-29-1994	Schulze-Beckinghausen	175	162		
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	A123	5,343,950	09-06-1994	Hale et al.	166	293		
	A124	5,339,899	08-23-1994	Ravi et al.	166	250		
	A125	5,332,048	07-26-1994	Underwood et al.	175	26		
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	A127	5,320,178	06-14-1994	Cornette	175	19		
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	A129	5,297,833	03-29-1994	Willis et al.	294	102.2		
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<i>7</i>	A132	5,285,204	02-08-1994	Sas-Jaworsky	340	854.9		
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	A151	5,096,465	03-17-1992	Chen et al.	51	295		
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<i>7</i>	A153	5,074,366	12-24-1991	Karlsson et al.	175	76		
<i>7</i>	A154	5,069,297	12-03-1991	Krueger, deceased et al.	175	65		
<i>7</i>	A155	5,060,737	10-29-1991	Mohn	175	104		
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	A159	5,022,472	06-11-1991	Bailey et al.	175	195		
	A160	5,009,265	04-23-1991	Bailey et al.	166	118		
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	A162	4,962,822	10-16-1990	Pascale	175	258		
	A163	4,921,386	05-01-1990	McArthur	414	22.51		
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4	A178	4,676,310	06-30-1987	Scherbatskoy et al.	166	65.1		
7	A179	4,671,358	06-09-1987	Lindsey, Jr. et al.	166	291		
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	A184	4,630,691	12-23-1986	Hooper	175	65		
	A185	4,605,077	08-12-1986	Boyadjieff	175	85		
	A186	4,604,724	08-05-1986	Shaginian et al.	364	478		
	A187	4,589,495	05-20-1986	Langer et al.	166	383		
	A188	4,583,603	04-22-1986	Dorleans et al.	175	324		
	A189	4,580,631	04-08-1986	Baugh	166	208		
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	A199	4,430,892	02-14-1984	Owings	73	151		
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7	B1	WO 02/086287	10-31-2002	WIPO	E21B	47/01	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	B19	WO 97/08418	03-06-1997	WIPO	E21B	4/18	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	B21	GB 2 357 101	06-13-2001	UK	E21B	7/06	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	B24	GB 2 216 926	10-18-1989	UK	E21B	7/20	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B25	SU 1618870	01-07-1991	Russia	E21B	33/14	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	B26	WO 96/28635	09-19-1996	WIPO	E21B	17/14	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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	C56	Editor, "Shell Runs Smart Robot Tractor," Hart's E & P, October 2002, p. 28	
<i>2</i>	C57	Galloway, "Rotary Drilling With Casing – A Field Proven Method Of Reducing Wellbore Construction Cost," Paper WOCD-0306092, World Oil Casing Drilling Technical Conference, March 6-7, 2003, pp. 1-7	
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Examiner <i>Frank [Signature]</i>		Date Considered <i>11/15/05</i>	
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.			

